



**The Secretary of Energy**  
Washington, DC 20585

March 4, 2003

The Honorable Edward J. Markey  
U.S. House of Representatives  
Washington, D.C. 20515-2107

Dear Representative Markey:

This is in response to your letter of October 22, 2002, requesting information on the transfer of nuclear technology to North Korea in connection with the Korean Peninsula Energy Development Organization (KEDO) reactor project.

As you know, the nuclear reactors that South Korea had agreed to build for North Korea were based on U.S.-origin technology provided by Westinghouse. Under the Atomic Energy Act (Section 57b), implemented through 10 CFR Part 810, approval for the transfer of U.S. nuclear technology requires authorization by the Secretary of Energy, with the concurrence of the State Department and in consultation with the Commerce and Defense Departments and the Nuclear Regulatory Commission (NRC). Westinghouse received an authorization for the KEDO project in May 1996, limited to five years in duration. In May 2001, the authorization was extended for another five years. In both instances, the authorization explicitly restricts U.S. technology transfers to that related to licensing and safe operations. The authorization also bars transfers of any U.S. technology that would enable North Korea to design or manufacture key components or nuclear reactor fuel. This approach paralleled the Agreed Framework, which blocked supply of key components and fuel, pending North Korea coming into full compliance with its International Atomic Energy Agency safeguards obligations.

From the inception, safeguards have been in place to protect against improper transfers of U.S. nuclear technology to North Korea. In particular, the Department's export control office has carefully and thoroughly reviewed technical documents related to the reactor project. To date, approximately 3,200 documents have been reviewed for export control concerns. Of these, roughly 3,100 were approved for release, with the stipulation that they only be transferred when needed, and the balance denied. Roughly 300 documents have been transferred to North Korea.

The technical documents reviewed by the Department fall generally into six categories:



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*Preliminary Safety Analysis Report (PSAR) Responses:* The PSAR is a publicly available report prepared for the licensing of a reactor in the United States.

It characterizes the reactor site, reactor safety systems, and reactor system response to design basis accidents. The Department has reviewed for export control concerns responses to technical questions that North Korea has put to Westinghouse and the Korean Electric Power Company (KEPCO), a Westinghouse licensee.

*Topical Reports:* The Department has reviewed topical reports that supplement technical information in the PSAR. The reports typically focus on specific reactor systems, components, or calculations/modeling for a class of nuclear power plants.

*Training Documents:* The Department has reviewed all classroom materials to train North Korean regulatory officials, reactor operators, reactor engineers, and maintenance personnel. South Korea initiated its nuclear reactor training program for North Korea earlier this year.

*Quality Assurance Documents:* The Department has reviewed quality assurance documents used during a recent audit by KEDO to ensure that the reactor design, manufacturing, and procurement procedures are followed and documented.

*Construction Documents:* The Department has reviewed documents related to the construction of the plant, including the following types of documents: drawings and diagrams for systems and components; specifications for systems, components, materials, and procurement; general design criteria, descriptions, and guidelines; testing and operational guidelines; system and testing evaluation reports; and equipment lists and data sheets.

*KEDO Documents:* The Department has reviewed technical reports prepared for the Nuclear Regulatory Commission that have some bearing on the KEDO project. These reports, requested by KEDO, describe computer codes used in reactor performance analysis.

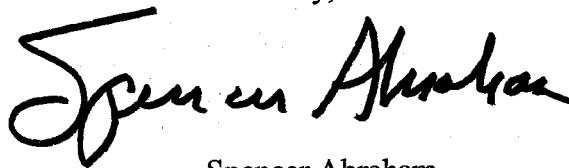
Proposed nuclear technology transfers to North Korea have been examined closely by the Department. We have dedicated resources and technical expertise in the National Laboratories to ensure that North Korea receives only that technology permitted under the May 2001 authorization, and does not receive technology or assistance that could further a nuclear weapons program.

Recent actions taken by North Korea clearly violate its international nonproliferation obligations. The Administration is now considering appropriate courses of action, possibly to include suspension or revocation of the May 2001 authorization.

For your reference, enclosed are a number of documents, including the letters of application for the 1996 and 2001 authorizations, the signed authorizations (Tab A), and copies of periodic reports submitted by Westinghouse (and its predecessor Combustion Engineering) (Tab B).

If you have any further questions, please contact me or Ms. Shannon Henderson, Acting Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

A handwritten signature in black ink, reading "Spencer Abraham". The signature is fluid and cursive, with the first name "Spencer" written in a larger, more prominent script than the last name "Abraham".

Spencer Abraham

Enclosures